

**Bio-Rad Laboratories  
Liquichek Diabetes Control  
Summary of Safety and Effectiveness**

K 052838

NOV - 9 2005

**1.0 Submitter**

Bio-Rad Laboratories  
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Irvine, California 92618-2017  
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**Contact Person**

Maria Zeballos  
Regulatory Affairs Specialist  
Telephone: (949) 598-1367

**Date of Summary Preparation**

September 16, 2005

**2.0 Device Identification**

Product Name: Liquichek Diabetes Control  
Common Name: Hematology and Pathology Devices  
Hematology quality control mixture

Classifications: Class II  
Product Code: GGM  
Regulation Number: 21 CFR 864.8625

**3.0 Device to Which Substantial Equivalence is Claimed**

Lyphocheck Diabetes Control  
Bio-Rad Laboratories  
Irvine, California 92618

510 (k) Number: K862186

**4.0 Description of Device**

This is a liquid product prepared from human whole blood containing preservatives and stabilizers.

**5.0 Intended Use**

Liquichek Diabetes Control is intended for use as an assayed quality control material to monitor the precision of laboratory testing procedures for the analytes listed in the package insert.

## 6.0 Comparison of the new device with the Predicate Device

Liquichek Diabetes Control claims substantial equivalence to the Lyphochek Diabetes Control currently in commercial distribution (K862186). Both of these are whole blood based controls .

Table 1. Similarities and Differences between new and predicate device.

Characteristics	Bio-Rad Laboratories Liquichek™ Diabetes Control (New Device)	Bio-Rad Laboratories Lyphochek Diabetes Control (Predicate Device K862186)
<b>Similarities</b>		
Intended Use	Liquichek Diabetes Control is intended for use as an assayed quality control material to monitor the precision of laboratory testing procedures for the analytes listed in the package insert.	Lyphochek Diabetes Control is intended for use as an assayed quality control material to monitor the precision of laboratory testing procedures for the analytes listed in the package insert.
Matrix	Human Whole Blood based	Human Whole Blood based
Preservatives	Contains preservatives	Contains preservatives
<b>Differences</b>		
Form	Liquid	Lyophilized
Storage (Unopened)	-10C to -70°C Until expiration date or 2°C to 8°C for 6 months	2°C to 8°C Until expiration date
Open Vial Claim	14 days at 2°C to 8 °C	7 days at 2 to 8°C
Analytes	Contains: <ul style="list-style-type: none"> <li>Hemoglobin A1C</li> <li>Total Hemoglobin</li> </ul> Does not contain: <ul style="list-style-type: none"> <li>Hemoglobin A1</li> <li>Hemoglobin F</li> <li>Total Glycated Hemoglobin</li> </ul>	Contains: <ul style="list-style-type: none"> <li>Hemoglobin A1C</li> <li>Hemoglobin A1</li> <li>Hemoglobin F</li> <li>Total Glycated Hemoglobin</li> </ul> Does not Contain: <ul style="list-style-type: none"> <li>Total Hemoglobin</li> </ul>

## 7.0 Statement of Supporting Data

Stability studies have been performed to determine the open vial stability and shelf life for this Control. Product claims are as follows:

- Open vial Stability: 14 days at 2 to 8°C.
- Shelf Life: 3 years at -10 to 70°C or  
6 months when stored tightly capped at 2 to 8°C.

All supporting data is retained on file at Bio-Rad Laboratories.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

NOV - 9 2005

Ms. Maria Zeballos  
Regulatory Affairs Specialist  
Bio-Rad Laboratories, QSD  
9500 Jeronimo Road  
Irvine, CA 92618-2017

Re: k052838  
Trade/Device Name: Liquichek Diabetes Control  
Regulation Number: 21 CFR 864.8625  
Regulation Name: Hematology Quality Control Mixture  
Regulatory Class: Class II  
Product Code: GGM  
Dated: October 5, 2005  
Received: October 7, 2005

Dear Ms. Zeballos:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

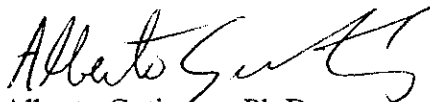
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Alberto Gutierrez", with a stylized flourish at the end.

Alberto Gutierrez, Ph.D.

Director

Division of Chemistry and Toxicology

Office of In Vitro Diagnostic Device

Evaluation and Safety

Center for Devices and

Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K052838

Device Name: Liquichek Diabetes Control

Indications For Use: Liquichek Diabetes Control is intended for use as an assayed quality control material to monitor the precision of laboratory testing procedures for the analytes listed in the package insert.

Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

Carol C Benson  
Division Sign-Off

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Office of In Vitro Diagnostic Device  
Evaluation and Safety

510(k) K052838